

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011577**Date Inspected:** 20-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Transverse Splice Weld at Side Panel Bike Path side. The weld joints are identified as OBE7B-002. The welder is identified as 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F-3. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Transverse Splice Weld at Side Panel Corner Assembly Bike Path side. The weld joints are identified as OBE7B-001. The welder is identified as 053742. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F-3. It was observed that the

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parameters noted down by ZPMC QC are in compliance with WPS.

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Transverse Splice Hold Back weld. The weld joints are identified as SP 365-001/002 and SP 365 – 003/004. The welder is identified as 053742. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Transverse Splice Hold Back weld. The weld joints are identified as SP 338-001/002 and SP 338 – 003/004. The welder is identified as 070046. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing repair welding by Submerged Arc Welding (SAW) for Transverse Splice weld. The weld joints are identified as OBE7-002, OBE7-003 and OBE7-004. The welder is identified as 053148 and 054458. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-223(2)-T-2. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6BE to 6CE

This QA Inspector observed ZPMC welding personnel performing repair welding by Shielded Metal Arc Welding (SMAW) for Transverse Splice Weld at Deck Panel Corner Assembly. The weld joints are identified as OBE6A-004. The welder is identified as 054467. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-FCM-Repair-1. The repair welding was been performed against the B-WR9901 Rev.0 and ZPMC UT report B787-UT-10747. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6CE

This QA Inspector observed ZPMC personnel at Segment 6CE side panel T-Ribs between PP 44 to 44.5 and PP 44.5 to 45 bolts snug tightening is in progress.

Segment 6CE and 7AE

This QA Inspector observed ZPMC personnel at Segment 6CE and 7AE Bottom Panel, Side Panel (North and South side) T-Ribs to T-Ribs match drilling with splice plate on is in progress subsequently U-Ribs to U-Ribs internal splice plate match drilling was in progress.

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Segment 6CW

This QA Inspector observed ZPMC personnel at Segment at Panel Point (PP) 47 clips connecting Bottom Panel T-Ribs to floor beam ASTM A 325 bolts installation is in progress.

Segment 6CW

This QA Inspector observed ZPMC personnel at Segment 6CW at PP 47 Lower Chevron counter weight side temporary bolts connecting the splice plate to box section removal and faying surfacing cleaning is in progress.

Segment 6CW

This QA Inspector observed ZPMC personnel at Segment 6CW at PP 44.5 the T-Stiffener welded vertically to Edge Panel carbon arc gouged area flush ground and Magnetic Particle Test (MT) been performed by ZPMC QC.

Segment 6AW

This QA Inspector observed ZPMC personnel at Segment 6AW at PP 39.75 the vertical T-Stiffener welded to side panel carbon arc gouged area flush ground area MT been performed by ZPMC QC.

Segment 6AW

This QA Inspector observed ZPMC personnel at Segment 6AW at PP 37 Longitudinal Diaphragm flange connected to floor beam weld carbon arc gouged and removed due to Ultrasonic Test (UT) rejection.

Segment 6CE

This QA Inspector observed ZPMC personnel at Segment 6CE between PP 45 to 45.5 and from PP 45.5 to PP 46 side panel T-Ribs to T-Ribs bolts installation with splice plate on and snug tightening is in progress.

Segment 6BE to 6CE

This QA Inspector observed ZPMC personnel at Segment 6BE to 6CE between PP 43 to PP 44 transverse splice and T-Rib hold back area weld visual discontinuities repair welding by SMAW process was in progress.

Segment 7AE to 7BE

This QA Inspector observed ZPMC personnel at Segment 7AE to 7BE transverse segment splice welding is in progress.

Lift 5 West

This QA Inspector observed ZPMC personnel at Lift 5 West counter weight side blasting activities is in progress.

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Segment 6BE

This QA Inspector observed ZPMC personnel at Segment 6BE cope holes grinding for Bottom Panel to Floor beam and Side Panel to Floor beam was in progress.

Cantilever

This QA Inspector observed ZPMC personnel at Cantilever BK001-016 3GK which will be fitted at PP 35 of east lift MT been performed to skin plate by ZPMC QC.

Cantilever

This QA Inspector observed ZPMC personnel at Cantilever BK001-021 grinding was been in progress for Skin plate weld from internal side.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath
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Quality Assurance Inspector

Reviewed By:	Miller,Mark
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QA Reviewer
